

- SPST-NO Rated 20A / 450VDC
- Will carry 40A / 450VDC for 20 mins (Fig.1)
- Magnetic arc blowout
- Miniature case size
- PCB mounting & chassis mounting
- Fits Mini-ISO footprint
- Pre-charge or discharge relay

Contacts

Contact arrangement	SPST-NO-DM (1 Form X)
Contact material	AgCu10 (Silver alloy)
Rated current	DC1 20A / 450VDC (25A PCB Version)
Max. switching voltage	450VDC
Max. breaking current	35A (450VDC>1cycle)
Max. switching power	9kW
Current carrying capacity	See Fig 1, 20A continuously. Up to 200A 0.6s
Initial contact resistance	≤ 10mΩ at 20A
Max. operating frequency	rated load 360 cycles/hour

Coil

Operating range	DC 12 ~ 80V See Table 1
Rated power consumption	Approx. 3W

Insulation

Coil insulation system	IEC 31, CLASS F 155°C
Insulation resistance	>100 MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact 3000V _{rms} (50/60Hz, 1min, <1mA leakage)
	open contacts 2000V _{rms} (50/60Hz, 1min, <1mA leakage)

General Data

Operate time (including bounce)	max. 30ms
Contact bounce time	max. 5ms
Release time	max. 10ms
Electrical life at full rated load	cycles 1 x 10 ⁴ 20A 450VDC
	5 x 10 ⁴ 10A 450VDC
	1 x 10 ⁵ 20A 72VDC
Mechanical life	cycles >3 x 10 ⁵

Environmental

Environmental protection	IP67
Ambient temperature	operating -40 to +85°C
	storage -40 to +125°C
Mechanical shock	20g, 11ms Functional, 50g Destructive
Vibration resistance	5g (10 ~ 500Hz)
Relative humidity	20% ~ 90%
Dimensions	L x W x H 29.6 x 29.2 x 30mm approx.(excluding flanges)
Weight	approx. 55g (flange mounting type), 52g (PCB type)



Ordering Code

D C 2 0 - 4 0 2 1 - 3 5 - 1 0 1 2

Series

Coil code:

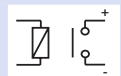
See table 1

Contact material

40: AgCu10

Contact arrangement

21: SPST-NO-DM (1 Form X)



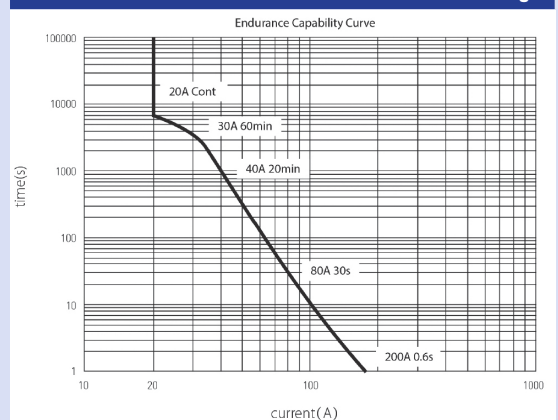
Mounting & terminations

35: PCB Mounting

46: Chassis Mounting

76: Plug in

Fig 1.



DC Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC@ 20°C)	Must release voltage min. (VDC)	Coil resistance $\Omega \pm 10\%$ (at 20°C)	Coil current (mA)
1012	12	9.00	1.0	46.5	258
1024	24	18.0	2.0	186	129
1048	48	36.0	4.0	743	65
1060	60	45.0	5.0	1230	49
1080	80	60.0	6.5	2130	38

Dimensions

Fig 2

